

AMENDMENTS TO THE SPECIFICATION

Please amend the Specification to read as follows:

Replace paragraph [0007] in the Specification of the above-identified application with the following paragraph:

[0007] In another embodiment, the invention additionally comprises the step of coating the bacterial aggregate with a second mixture of bacteria and lectin, whereby a lamellar aggregate is constructed. One may also wish to use a third, or any number, of mixtures. The invention is also an aggregate created by this method.

Replace paragraph [0024] in the Specification of the above-identified application with the following paragraph:

[0024] (ii) In order to construct simple multispecies aggregates (heterogeneous) the following method is preferred: To a suspension (total cell density of 1×10^7 - 5×10^8 cells/mL) comprising the desired ratio[[n]] of chosen species (must all show affinity for the chosen lectin) one would add an equal volume of various concentrations of the appropriate lectin [see Table 2] (1×10^{-5} – 1 mg/mL). One would examine under phase contrast microscopy in order to estimate the size of aggregates generated. The relationship between aggregate size and lectin concentration will be parabolic (Fig 2). Select the appropriate size of aggregate from either the high (XS) or low (LIM) lectin concentration range.

Replace paragraph [0032] in the Specification of the above-identified application with the following paragraph:

[0032] In another version of the present invention, one would test a biocide with the aggregates described above in the following manner: Volumes (1-10 mL) of customized aggregate suspensions, formed as described earlier, are held in suitable containers (microtitre plate well, mini-centrifuge tubes, pyrex glass test-tubes) to which are added appropriate concentrations of the test biocide (volume 5-25% of suspension volume). After a chosen contact times ~~have~~ has elapsed (1-30 minutes) samples are removed to a neutralizer solution appropriate to the chosen biocide containing the antagonistic sugar (50 mM) for the chosen lectin (See Table 1). The aggregates disperse into single cell suspension that upon which simple plate count estimates of the viable surviving cell number may be conducted. Control

experiments are conducted on disaggregated populations created by resuspending the customized aggregates in the antagonistic sugar (50 mM) prior to the addition of biocide.

Replace paragraph [0044] in the Specification of the above-identified application with the following paragraph:

[0044] Binary lamellar aggregates were constructed for all combinations of the three test species. Core aggregate size was 50 microns diameter. Cores were coated with an equal number of the partner species. Each test species served as both core-aggregate and shell in these experiments. When free suspensions of these organisms were mixed and exposed to QUATs, there was no aggregation and no change in the survival pattern of either species relative to exposure in monoculture, indeed the data were super-imposable (Example data shown in Fig. 8A and 8B). When the cells were aggregated prior to exposure to QUATs, then it became apparent that there was not only a protection afforded by aggregation but also that the relative location of one species to the other affected the inactivation. Selected data is presented that compares inactivation of unordered (homogeneous) aggregates of two different species with ones where each of the partner organisms serves as either the core or shell to the other. These effects were noted for all organism combinations and biocides tested.

Replace Table 7 on page 21 of the Specification of the above-identified application with the following paragraph:

<i>Pseudomonas</i> sp. 2881 – <i>A. hydrophila</i> <i>C. aquaticum</i> multi-species aggregate	% No. survivors after 20 minutes	
	<i>Pseudomonas</i> sp. 2881	<i>C. aquaticum</i>
Unordered mixture	0.264	0.0412
<i>Pseudomonas</i> sp. 2881 shell, <i>C. aquaticum</i> core	0.219	0.0698
<i>C. aquaticum</i> shell, <i>Pseudomonas</i> sp. 2881 core	0.425	>0.001

Replace Table 8 on page 21 of the Specification of the above-identified application with the following paragraph:

<i>Pseudomonas</i> sp. 2881 <i>A. hydrophila</i> – <i>A. hydrophila</i> <i>C. aquaticum</i> multi-species aggregate	% No. survivors after 20 minutes	
	<i>A. hydrophila</i>	<i>C. aquaticum</i>
Unordered mixture	0.172	0.0364
<i>A. hydrophila</i> shell, <i>C. aquaticum</i> core	0.131	0.0457
<i>C. aquaticum</i> shell, <i>A. hydrophila</i> core	0.365	>0.001